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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/574,076

09/21/2006

Nobuo Oyama

2006_ 0474A

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08/04/2008

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

CHOI, JACOB Y

ART UNIT

PAPER NUMBER

2885

MAIL DATE

DELIVERY MODE

08/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/574,076 | Applicant(s) OYAMA, NOBUO | |
| | Examiner JACOB CHOI | Art Unit 2885 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/5/2006 & 10/23/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on July 5, 2006 and October 23, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims **1, 5, 8, and 9** are objected to because of the following informalities: claim include unclear claim terms such as "its" and "can be". The meets and bounds of the patent protection desired are unclear.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Note: Claims in a pending application should be given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification. In re Mraz, 173 USPQ 25 (CCPA 1972).

Claims **1, 4, and 5** are rejected under 35 U.S.C. 102(b) as being anticipated by Shikama et al. (USPN 5,662,400).

Regarding claim 1, Shikama et al. discloses a light source (e.g., 120) for radiating light through electric discharge between opposing electrodes (e.g., claim 1; "... a pair of discharge electrodes with a center of emission disposed there between"), a reflecting mirror (e.g., 130) for reflecting a flux of light that is radiated from the light source (e.g., 120) in order to control the angle of the flux of light (e.g., Figures 6, 13, 14, 19, 21, 23, and 39), and a path changing mirror (e.g., 11a-11d and/or 14R) for changing the path of the flux of light whose divergence (e.g., claim 5; "... a convex lens receiving the diverging light portion") has been controlled by the reflecting mirror (e.g., 130), the light source (e.g., 120) being placed in a manner that makes an axis line connecting the electrodes of the light source (e.g., Figures 17 and 36), or other reference lines used to

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specify a posture of the light source (e.g., Figure 2), substantially coincide with a center line of the flux of light controlled by the reflecting mirror (see Figure below), the path changing mirror (e.g., 11a-11d and/or 14R) redirecting the controlled flux of light to a desired direction around the center line of the controlled flux of light.

Regarding claim 4, Shikama et al. discloses the light source is a discharge lamp such as a metal halide lamp (e.g., column 1, lines 30-45; "... a white light source, such as a metal halide lamp, xenon lamp, or halogen lamp") or a low pressure sodium lamp.

Regarding claim 5, Shikama et al. discloses the path changing mirror is a light reflector shaped like a flat plate (e.g., Figures 35 and 50) or a curved plate and having, on at least one side, ridges (e.g., Figure 40a; 162) that are shaped like an arc, an elliptical arc, a curved plate and having, on at least one side, ridges that are shaped like an arc, an elliptical arc, or a sine curve in section and that are arranged side by side in contact with one another, the light reflector (e.g., 130) having on its reflecting face a transparent body portion that is composed of the ridges, or a flat or curved structure in which surfaces of the ridges have a light reflecting function (e.g., Figure 40b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **2, 3, and 6-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikama et al. (USPN 5,662,400).

Regarding claim 2, Shikama et al. discloses the light source (e.g., 120) and the reflecting mirror (e.g., 130) which controls the angle (e.g., Figures 6a-c) of a flux of light emitted from the light source, and a path changing mirror (e.g., 11a-11d and/or 14R) container set on a controlled light flux path side of the casing to house the path (e.g., Figure 35) changing mirror.

Shikama et al. failed to specifically show the overall design including the casing/housing, which may include elements of the projector (e.g., some mechanical holding elements are shown and described in Figures 13, 14, and 39).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to specify the casing and the housing of the projector. Examiner takes an Official notice that the casing and the housing is implicitly taught from the prior art reference, see MPEP 2144.

Regarding claim 3, Shikama et al. further discloses a holding means for holding the casing such that the casing can be positioned in a desired direction around a vertical axis line (e.g., Figures 6a-c).

Regarding claims 6, & 7, Shikama et al. further discloses the light source is a discharge lamp such as a metal halide lamp (e.g., column 1, lines 30-45; "... a white light source, such as a metal halide lamp, xenon lamp, or halogen lamp") or a low pressure sodium lamp.

Regarding claims 8, & 9, Shikama et al. further discloses the path changing mirror is a light reflector shaped like a flat plate (e.g., Figures 35 and 50) or a curved plate and having, on at least one side, ridges (e.g., Figure 40a; 162) that are shaped like an arc, an elliptical arc, a curved plate and having, on at least one side, ridges that are shaped like an arc, an elliptical arc, or a sine curve in section and that are arranged side by side in contact with one another, the light reflector (e.g., 130) having on its reflecting face a transparent body portion that is composed of the ridges, or a flat or curved structure in which surfaces of the ridges have a light reflecting function (e.g., Figure 40b).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB CHOI whose telephone number is (571)272-2367. The examiner can normally be reached on Monday-Friday (7:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

/JACOB CHOI/
Primary Examiner, Art Unit 2885